UNITED STATES PATENT AND TRADEMARK OFFICE

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 10/534,497 | 02/03/2006 | Koon Seok Lee | 7950.035.00-US | 2822 |

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| EXAMINER |
|---|
| SYED, NABIL H |

| ART UNIT | PAPER NUMBER |
|---|---|
| 2612 | |

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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

| | Application No. | Applicant(s) |
| :--- | :--- | :--- |
| **Office Action Summary** | 10/534,497 | LEE ET AL. |
| | Examiner | Art Unit | |
| | NABIL H. SYED | 2612 | |

*-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --*

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

1)☒ Responsive to communication(s) filed on <u>03 April 2008</u>.
2a)☒ This action is **FINAL**.          2b)☐ This action is non-final.
3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

4)☒ Claim(s) <u>1-12</u> is/are pending in the application.
    4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5)☐ Claim(s) _____ is/are allowed.
6)☒ Claim(s) <u>1-12</u> is/are rejected.
7)☐ Claim(s) _____ is/are objected to.
8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

**Application Papers**

9)☐ The specification is objected to by the Examiner.
10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.
    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
    a)☐ All   b)☐ Some *  c)☐ None of:
      1.☐ Certified copies of the priority documents have been received.
      2.☐ Certified copies of the priority documents have been received in Application No. _____.
      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
    * See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

1)☒ Notice of References Cited (PTO-892)
2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3)☐ Information Disclosure Statement(s) (PTO/SB/08)
    Paper No(s)/Mail Date _____.
4)☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____ .
5)☐ Notice of Informal Patent Application
6)☐ Other: _____ .

## DETAILED ACTION

1.      The following is a final office action on merits. Amendments received on 4/03/08

have been entered. Claims 1-12 are pending.

### Claim Rejections - 35 USC § 102

2.      The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that

form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public
>
> use or on sale in this country, more than one year prior to the date of application for patent in the United
>
> States.

3.      Claims 1, 3-7, 9-12 are rejected under 35 U.S.C. 102(b) as being anticipated by

Zimmermann (5,471,190).

As of claim 1, Zimmermann discloses a method for setting a home code of a

home network system having a smart light switch network node 2 and 3 (see fig. 1)

wherein the device 2 and 3 can control or be controlled by any other similar device

connected to the same power line. So a device 2 can be referred to as a first adaptor

and other devices 3 can be referred to as second adaptors (see fig. 3; also see col. 4,

lines 22-45), the method comprising the steps:

creating the home code of the first adaptor (via creating the home code of the first

switch 13; see fig. 3 and 4) ;

determining whether or not the home code is duplicated (via transmitting the house

code to determine that other devices are not using the same code; see col. 6, lines 20-

33; also see fig. 5) ; and

if the home code is not duplicated, setting the home code of the first adaptor to the second adaptors (via teaching the same house code to other modules, that first switch selected; see col. 6). (Note: the functionality of the network management unit is integrated in the light switch 13, since each light switch can be controlled or control other light switches).

As of claims 3 and 9, Zimmermann discloses that the house codes are generated arbitrarily, so the light switch has to have a random number generator to generate a arbitrary number every time it determines that the previous number generated is already in use with some other network (see col. 10, lines 30-34).

As of claim 4 and 10, Zimmermann discloses that microprocessor of the light switch 13 makes up a house code. First it transmits the house code, seeking a response and waits a predetermined interval for a response. If it hears a response a neighboring building is already using the house code and it cannot adopt this house code, since each house must use a different house code. If no response is found then the house code is adopted (see col. 6, lines 20-33; also see fig. 5) (Note: the functionality of the network management unit is integrated in the light switch 13, since each light switch can be controlled or control other light switches).

As of claim 5 and 12, Zimmermann discloses if the home code is duplicated, the home code of the first adaptor is deleted (Note: since the microprocessor of the first module generates a new house code if a neighboring building is already using the first generated code, it is deleting the first code and generating the new one; see col. 6, lines 25-30).

As of claim 6, Zimmermann discloses a method for setting a home code of a

home network system having a smart light switch network node 2 and 3 (see fig. 1)

wherein the device 2 and 3 can control or be controlled by any other similar device

connected to the same power line. So a device 2 can be referred to as a first adaptor

and other devices 3 can be referred to as second adaptors (see fig. 3; also see col. 4,

lines 22-45), the method comprising the steps:

Zimmermann discloses that microprocessor of the light switch 13 makes up a house

code. First it transmits the house code, seeking a response and waits a predetermined

interval for a response. If it hears a response a neighboring building is already using the

house code and it cannot adopt this house code, since each house must use a different

house code. If no response is found then the house code is adopted (see col. 6, lines

20-33; also see fig. 5) (Note: the functionality of the network management unit is

integrated in the light switch 13, since each light switch can be controlled or control

other light switches).

As of claim 7, Zimmermann discloses the step of determining whether the

appliance is initially installed or additionally installed, before the home code create

command transmitting step (via generating the house code only for the first module

installed in the house and when the second module is installed house code is not

created using that module because the second module is taught the same house code

made up by the first module, so before making a house code network determines that if

the module begin installed is the first module or the second module; see col. 6, lines 5-

11 and col. 6, lines 38-46).

As of claim 11, Zimmermann discloses: annexing the home code of the first

adaptor to a head of the home code setting command (via putting the house code in the

identification message transmitted by the first module; see col. 6, lines 52-61;

transmitting the home code setting command having the home code to the second

adaptors (via transmitting the identification message to the second module; see col. 6,

liens 53-54); and

setting the home code annexed to the head of the home code setting command to the

home code of the second adaptors (via second module adopting the house code

transmitted by the first module; see col. 6, lines 55-59).

### Claim Rejections - 35 USC § 103

4.      The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set
> forth in section 102 of this title, if the differences between the subject matter sought to be patented and
> the prior art are such that the subject matter as a whole would have been obvious at the time the
> invention was made to a person having ordinary skill in the art to which said subject matter pertains.
> Patentability shall not be negatived by the manner in which the invention was made.

5.      Claims 2 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over

Zimmermann (5,471,190) in view of Seki (5,844,496).

As of claim 2 and 8, Zimmermann discloses all the limitations of the claimed

invention as mentioned in claims 1 and 6 above, but fails to explicitly disclose that the

house code is generated by combining a timing count value and an initial code value of

the first adaptor. The Examiner takes official notice that it would have been obvious to

one having ordinary skill in the art at the time the invention was made to modify the

system of Zimmermann to generate a house code by combining a timing count value

and initial code value since it is well known in the art to use different methods such as

pseudo random number, counter values, hash value to generate a unique and separate

code to identify each device over a communication network.

In order to support the Examiner's point of view Seki discloses a method of

generating identification information including a fixed code (initial code value) and a

variable code. The variable code is determined by timer circuit, (timing count value),

random number generators or arithmetic circuits (see col. 2, lines 60-65).

From the teaching of Seki it would have been obvious to one having ordinary skill

in the art to use a timer count value and initial code value to generate a unique code for

a device in order to avoid the duplication of the codes assigned to multiple devices.

### Response to Arguments

6.      Applicant's arguments see remarks page 1, filed 4/03/08, with respect to 35

U.S.C 112 second paragraph have been fully considered and are persuasive.  The

rejection of 35 U.S.C 112 second paragraph has been withdrawn.

7.      Applicant's arguments with respect to the art rejection filed 4/03/08 have been

fully considered but they are not persuasive.

8.      As per applicant argument that Zimmerman fails to discloses that "creating the

home code of the first adaptor … if the home code is not duplicated, setting the home

code of the first adaptor to the second adaptors, wherein the first adaptor corresponds

to the network managing unit that manages the appliances." The Examiner respectfully

disagrees. Applicants are reminded that during examination, claims are given their

"broadest reasonable interpretation . . .." *In re Morris*, 127 F.3d 1048, 1054, 44 USPQ2d

1023, 1027 (Fed. Cir. 1997); *In re Prater*, 415 F.2d 1393, 1404-05, 162USPQ 541, 550-

51 (CCPA 1969).[1] Therefore, under the broadest reasonable interpretation standard,

the Examiner maintains his interpretations. The Examiner is interpreting that the

functionality of the network management unit is integrated in the light switch 13, since

each light switch can be controlled or control other light switches. Further Zimmerman

discloses that smart light switch network node, can control any other similar device

connected to the same media and can be employed for the purpose of remotely

controlling electrical lights, fixtures, appliances or any actuator in the home, office

building automobile, airplane, ship or the like (see col. 4, lines 36-45), which clearly

shows that smart light switch has the functionality of the network managing unit that

manages the appliances.

As per applicant argument, "Zimmerman clearly teaches away from, inter alia, a

"network managing unit that manages the appliances," and, "a first adaptor,". The

Examiner respectfully disagrees. Examiner respectfully traverses Applicant's opinion as

according to the MPEP 2123 [R-5]. "…The prior art's mere disclosure of more than one

alternative does not constitute a teaching away from any of these alternatives because

such disclosure does not criticize, discredit , or otherwise discourage the solution

claimed…" As in the present case Zimmerman discloses that a central controller

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[1] 19 See also MPEP §2111; *In re Graves*, 69 F.3d 1147, 1152, 36 USPQ2d 1697, 1701
(Fed. Cir. 1995); *In re Etter*, 756 F.2d 852, 858, 225 USPQ 1, 5 (Fed. Cir. 1985) (en banc).

(network managing unit) can be used in a network system to control the appliances (see col. 2, lines 50-56).

As per applicant argument, Zimmerman fails to disclose "transmitting home code create command to the first adaptor from the network managing unit according to a user's command," The Examiner respectfully disagrees. Zimmerman discloses that once a smart light switch has learned a house code, it can teach other "student" switches the house code (see col. 6, lines 39-46) and the student switch can further teach the house code to the new installed modules/switches (see col. 7, lines 15-20). So the Examiner is interpreting the first switch having the functionality of the network managing unit, and the first student switch as the first adaptor. From the definition given above it can be seen that the first switch (managing unit) transmits a command to the second switch (first adaptor) to create a home code.

As per applicant's challenge to the official notice, Seki discloses a method of generating identification information including a fixed code (initial code value) and a variable code. The variable code is determined by timer circuit, (timing count value), random number generators or arithmetic circuits (see col. 2, lines 60-65).

From the teaching of Seki it would have been obvious to one having ordinary skill in the art to use a timer count value and initial code value to generate a unique code for a device in order to avoid the duplication of the codes assigned to multiple devices.

## Conclusion

9.      Applicant's amendment necessitated the new ground(s) of rejection presented in

this Office action.  Accordingly, **THIS ACTION IS MADE FINAL**.  See MPEP

§ 706.07(a).  Applicant is reminded of the extension of time policy as set forth in 37

CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE

MONTHS from the mailing date of this action.  In the event a first reply is filed within

TWO MONTHS of the mailing date of this final action and the advisory action is not

mailed until after the end of the THREE-MONTH shortened statutory period, then the

shortened statutory period will expire on the date the advisory action is mailed, and any

extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

the advisory action.  In no event, however, will the statutory period for reply expire later

than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to NABIL H. SYED whose telephone number is (571)270-

3028.  The examiner can normally be reached on M-F 7:30-5:00 alt Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Brian Zimmerman can be reached on (571)272-3059.  The fax phone

number for the organization where this application or proceeding is assigned is 571-

273-8300.

Information regarding the status of an application may be obtained from the

Patent Application Information Retrieval (PAIR) system.  Status information for

published applications may be obtained from either Private PAIR or Public PAIR.

Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see http://pair-direct.uspto.gov. Should

you have questions on access to the Private PAIR system, contact the Electronic

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USPTO Customer Service Representative or access to the automated information

system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.


Nabil H Syed
Examiner
Art Unit 2612


N.S

/Brian A Zimmerman/
Supervisory Patent Examiner, Art Unit 2612